

IN THE CLAIMS

Please amend claims 1, 13, 14, 26 and 27 and cancel claims 2, 5-11, 15, 18-24 and 28-29.

Claim 1 (Currently amended) An electric power steering system comprising:

an electric motor disposed in a vehicle to apply torque to a steerable wheel ~~and a;~~
a vehicle speed sensor, ~~said vehicle speed sensor~~ generating a vehicle speed signal;

and

a controller coupled to said vehicle speed sensor and said electric motor,;

~~wherein said controller generating~~ generates a scheduled compensated torque command utilizing a compensator function based on a torque command signal, said controller further generating a scheduled compensated torque command for said electric motor utilizing a blending function, the blending function outputting the scheduled compensated torque command equal to the compensated torque command signal when the vehicle speed signal indicates a vehicle speed is less than or equal to a first threshold speed, the blending function outputting the scheduled compensated torque command equal to the torque command signal when the vehicle speed signal indicates the vehicle speed is greater than or equal to a second threshold speed, the second threshold speed being greater than the first threshold speed, the blending function outputting the scheduled compensated torque command equal to a first value that is calculated utilizing the torque command signal, the compensated torque command signal, and a blend scheduling signal when the vehicle speed signal indicates the vehicle speed is greater than the first threshold speed and less than the second threshold speed

~~to said electric motor, said scheduled compensated torque command based on a blend of a torque command signal and a compensated torque command signal, wherein any of said torque command signal, said compensated torque command signal or said blend is based on said vehicle speed signal.~~

Claim 2 (Cancelled).

Claim 3 (Original) The system of Claim 1 wherein said blend scheduling signal is based on a look-up table responsive to said vehicle speed signal.

Claim 4 (Original) The system of Claim 1 wherein said torque command signal is based on

a torque signal and is indicative of a desired assist torque for said steering system.

Claims 5-11 (Cancelled).

Claim 12 (Original) The system of Claim 1 wherein said scheduled compensated torque command is configured to facilitate characterization of at least one of: system stability, torque disturbance rejection; and input impedance.

Claim 13 (Currently amended) The system of Claim 1 wherein said scheduled compensated torque command is configured to characterize on-center feel of said torque control of said electric power steering system.

Claim 14 (Currently amended) A method of controlling an electric power steering system, the method comprising:

receiving a torque command signal;

receiving a vehicle speed signal responsive to a speed of a vehicle; and

generating a compensated torque command signal utilizing a compensator function based on a torque command signal; and

generating a scheduled compensated torque command for said electric motor utilizing a blending function, the blending function outputting the scheduled compensated torque command equal to the compensated torque command signal when the vehicle speed signal indicates a vehicle speed is less than or equal to a first threshold speed, the blending function outputting the scheduled compensated torque command equal to the torque command signal when the vehicle speed signal indicates the vehicle speed is greater than or equal to a second threshold speed, the second threshold speed being greater than the first threshold speed, the blending function outputting the scheduled compensated torque command equal to a first value that is calculated utilizing the torque command signal, the compensated torque command signal, and a blend scheduling signal when the vehicle speed signal indicates the vehicle speed is greater than the first threshold speed and less than the second threshold speed

~~generating a scheduled compensated torque command, said scheduled compensated torque command based on a blend of a torque command signal and a compensated torque command signal, wherein any of said torque command signal, said compensated torque command signal or said blend is based on said vehicle speed signal.~~

Claim 15 (Cancelled)

Claim 16 (Original) The method of Claim 14 wherein said blend scheduling signal is based on a look-up table responsive to said vehicle speed signal.

Claim 17 (Original) The method of Claim 14 wherein said torque command signal is a based on said torque signal and is indicative of a desired assist torque for said steering system.

Claims 18-24 (Cancelled).

Claim 25 (Original) The method of Claim 14 wherein said scheduled compensated torque command is configured to facilitate characterization of at least one of: system stability, torque disturbance rejection; and input impedance.

Claim 26 (Currently amended) The method of Claim 14 wherein said scheduled compensated torque command is configured to characterize on-center feel ~~of said torque control~~ of said electric power steering system.

Claim 27 (Currently amended) A storage medium encoded with a machine-readable computer program code;

said code including instructions for causing a computer to implement a method for controlling an electric power steering system, the method comprising:

receiving a torque command signal;

receiving a vehicle speed signal responsive to a speed of a vehicle; and

generating a compensated torque command signal utilizing a compensator function based on the torque command signal; and

generating a scheduled compensated torque command for said electric motor utilizing a blending function, the blending function outputting the scheduled compensated torque command equal to the compensated torque command signal when the vehicle speed signal indicates a vehicle speed is less than or equal to a first threshold speed, the blending function outputting the scheduled compensated torque command equal to the torque command signal when the vehicle speed signal indicates the vehicle speed is greater than or equal to a second threshold speed, the second threshold speed being greater than the first threshold speed, the

blending function outputting the scheduled compensated torque command equal to a first value that is calculated utilizing the torque command signal, the compensated torque command signal, and a blend scheduling signal when the vehicle speed signal indicates the vehicle speed is greater than the first threshold speed and less than the second threshold speed
~~generating a scheduled compensated torque command, said scheduled compensated torque command based on a blend of a torque command signal and a compensated torque command signal, wherein any of said torque command signal, said compensated torque command signal or said blend is based on said vehicle speed signal.~~

Claims 28-29 (Cancelled).